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ABSTRACT

The increasing complexity of management and planning within institutions of higher education has fostered the development of more sophisticated theories of management in higher education. Such complexity has also encouraged the development of a number of academic planning tools and models to aid administrators in management through access to data and projections of the consequences of their decisions. The use of such models and the need for increasingly sophisticated planning seems bound to increase if institutional vitality is to be insured in a period of reduced resources. Such management complexity increases the specialized skills required to manage institutions and seems likely to result in additional conflicts between administrators and faculty over governance issues. Academic planning does not produce solutions to all the problems that confront institutions, especially those that relate to social issues such as access and sexual equality. Yet by understanding the complexities of academic management and by the ability of academic planning to provide a means for the development of incremental change reflecting the concerns of the university community, an arena for the resolution of conflict within the university can be established. It is toward such ends that academic planning and academic management must strive. (Author/MSE)

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PROFESSIONAL MANAGEMENT AND ACADEMIC PLANNING: SOME RECENT CONSIDERATIONS

By Thomas J. Linney

Fiscal restraint, revision of mandatory retirement laws, sexual equity, higher percentages of tenured faculty, and continuing inflation in operating costs—these are some of the current conditions that complicate the tasks of planning and management in higher education. Campuses faced with declining enrollments must plan to eliminate programs. The potential for financial exigency makes the task of planning not only more complicated but also requires delicate and demanding management practices and skills to maintain institutional vitality. The elements of good academic planning also require increased levels of management skills on the part of university faculty and administrators involved in academic planning.

Management and academic planning are closely related in higher education institutions and yet the meaning of each of these terms remains imprecise. This discussion is concerned with the process by which institutions define their philosophy and mission, establish goals in keeping with that mission, devise programs to attain such goals, evaluate programs in regard to goal attainment, and marshal the human and financial resources necessary to maintain the institution and achieve the goals of its chosen mission. Recent discussions in the literature describe new understandings of the concept of management in higher education and further developments in academic planning, including the use of models, that enhance the abilities of administrators in higher education institutions.

Management or Planning?

As economic conditions in general have become more restrictive, scholars, planners, and management specialists have turned their attention to higher education, which is an indication of its perceived importance to the continued development of this society. However, continued confusion has existed within the higher education community over the best way to develop and derive maximum use of the resources available from public and private sources. Disputes over academic management and the use of academic planning as a tool of the management process have existed since the emergence of centralized theories of management near the turn of the century.

Questions of efficiency in academic organizations were addressed by Cooke (1910) in a report to the Carnegie Foundation for the Advancement of Teaching. Faculty committees were criticized for demanding too large a role in university administration. University administrators were criticized for yielding too much autonomy to the departmental level, thus weakening the "essentials of real authority" (Cooke 1910, p. 12).

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More recently, Beach (1968) discussed the historical roots of the conflict between faculty and administrators over specialized management skills and issues of faculty autonomy that developed in this century. Beach describes these historical conflicts as products of the emerging disciplines, which had explicit and commonly held goals, and systems of reward and procedures that were clearly understood, in contrast to the university, whose goals were becoming increasingly broad. His prescription for improvement was to develop a more rationalized approach to institutional objectives, rewards, and procedures.

In the early seventies, a series of studies supported by the Carnegie Commission on Higher Education attempted to identify the major issues to prepare the higher education community for the anticipated hard times ahead. Kerr in 1971 framed the terms of continued discussions of planning and management and set forth the ingredients of continued conflict.

> Today colleges and universities are pushed simultaneously toward costly change on the one hand and retrenchment on the other by concerned critics both on and off the campus. Some of these critics urge colleges to reform the instructional experience with enriched curricula and innovative teaching methods. Others warn the institutions against financial disaster and urge presidents to slash costs in every possible way (Clark Kerr quoted in Bowen and Douglas 1971, p. xi).

Bowen and Douglas (1971) developed concepts of educational efficiency that had particular relevance to liberal arts institutions. Special attention was given to methods and costs of instruction, internal cost calculation, faculty workloads, and innovations already available that could contribute to efficiencies considered necessary for institutional progress and to avoid insituational stagnation.

In fact, these Carnegie-sponsored studies from the early seventies presage the mode and tone of current developments in planning and management that appear in the more recent literature.

The Carnegie Commission's prescription of more efficient use of resources seems as valid today as when it was first articulated (1972). The Commission predicted that more effective resource use would have certain consequences for higher education institutions:

> It will cause conflicts—of department versus department, of faculty against administration, of administration versus state authorities. Costs will confront quality; the new will challenge the old; the welfare of the total institution will battle against the status quo of its component parts. Unionization becomes more likely as faculty members face some unpleasant changes, as they seek to defend what they have or what they have come to expect. Consensus is more likely when the struggle over money is less intense.
>
> It will cause a greater degree of centralization of authority on campus—perhaps also in the coordinating council or the state government. Administration, whether inside or outside, gains authority because it deals with money and money is now particularly important. Also, many of the policies that save money, such as avoidance of duplication of effort, must be made and enforced centrally. Administration in academic life rightfully is a means not an end. Under these circumstances, however, it may come to seem and even sometimes to be that the means determine the ends (Carnegie Commission on Higher Education 1972, p. 21).

Thus governance and management were predicted to and have become more difficult, and the necessary institutional adjustments are beginning to be reflected in the literature devoted to management and planning. Further observations stressing the development of management efficiency were offered by Mood et al. in 1972 in supplemental studies. This set of documents remains remarkably fresh in outlook and in the accuracy of its predictions for the direction of planning and management alternatives to be taken up in higher education institutions.

Management Perspectives

Modern approaches to academic management developed from attempts to apply systematic analysis to problems of colleges and universities such that rational decisions could be ar-

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rived at regarding continued development of academic institutions. A number of theories and approaches are discussed in the recent literature. While it appears that Beach's (1968) pleas for greater rationalization about university purposes have been ignored, the Carnegie Commission's suggested conflict among departments and movement of decision-making to central offices certainly seems to have been realized, especially when statewide enrollment levels have dropped or fiscal stringencies have been imposed.

Cohen and March (1974) separated the problems of management and planning in university organizations from those in other formal organizations by noting the fundamentally ambiguous nature of higher education institutions. Nonacademic organizations can be more simply defined through the problems they address and share. This simplicity is missing in university organizations. In fact, Cohen and March propose that management decision-making in such an ambiguous environment represents a ". . . garbage can into which various problems and solutions are dumped by participants. . . . when a 'choice opportunity' appears (defined as an occasion when a decision must be produced)" (Cohen and March 1974, p. 81). Under such conditions management decisions are compounded by degree of difficulty and the relative volatility of both the problem situation and attitudes of the policymakers called in to act.

Resolution of the problem or making a decision is only one of three options available in Cohen and March's theory. The others are (1) flight or change of context from the original problem, and (2) oversight, when decisions are complicated by other choices and one of those other choices by transference makes the first decision unnecessary. Under such a theory, the original problem often is not resolved.

This very complex model of university management, characterized by Cohen and March as "organized anarchy," is used to advance a theory of university management in which the problems of academic and curricular decisions, budget decisions, academic personnel decisions, and planning are seen as all basically ambiguous areas of choice in which actual decisions are made as much by the manner in which the issues are presented to the decision-makers as by choice among rational alternatives for the use of resources by academic leaders. Under such a theory, planning is reduced to a symbolic exercise and excuse for interaction, out of which decisions sometimes come based on manner of presentation.

Other perspectives (discussed below) advance less complex explanations of the academic management process and give more importance to academic planning. Other theoretical constructs generally tend to emphasize the uniqueness of the academic enterprise and suggest that management techniques adopted wholesale from other management situations usually do not fare well in the higher education environment.

Lindquist (1974), who is primarily concerned with academic innovation, sketches a model of political interaction that stresses linkages among collaborative approaches to problem-solving; the need for development of new academic roles and programs to cope with changing conditions; and the research, development, and diffusion process that promotes new programs and new solutions to problems faced on campus. Such linkages then are developed in the manner of tradeoffs between desires of the advocates of change and the political constituencies that provide leadership to the university. This model grew from planning procedures needed for proposed innovations and stresses the greater importance of academic planning for coping with the future than previous models.

Balderston's (1974) work stresses more complex management theories, though not as complex as Cohen and March's. For Balderston (1974, p. 13), the concepts of "complementarity, independence, and substitution" comprise a framework for analysis that must be applied to goals, resource allocation decisions, and the development of the organization in a process that allows for tradeoffs, recognizes reality, but is not overtly political. This work reflects more the attitudes one might find in the business office than in the president's office and as such reflects important professional concerns.

In a later work (Michalak 1977), Balderson offers some perceptive views of the gap between academic management and the views of such management by the faculty. He also broadens his analytical framework to account for continued difficulties in implementing statewide systems of management coordination. Balderson suggests that "very expert and . . . very unobtrusive administration and management skills are increasingly necessary to respond to accountability, justification and fiscal constraints with which colleges and universities will be forced to live" (Michalak 1977, p. 9).

Richmond and Farmer (1976) offer a study critical of academic management. They attribute poor management to the uncertain nature of academic goals, financial constraints, and the independence and traditional autonomy of academic faculty. Their case does not recognize the university as a completely unique management task but suggests such organizations fall within contingency theories of management (sometimes called open-system theories). These theories take into account organizational differences and complexities but maintain that leadership skills, authority relationships, motivations, and organizational design and planning can be applied in any setting to accomplish programmatic goals and develop the university organization.

Baldridge [(1971a and 1971b), (1978) and (1979)] has discussed the management and guidance of universities from an organizational-theory perspective. In his earliest work (1971a), he proposed a political model of university management rather than the more typical bureaucratic or collegiate management models. His later work expands this theme by suggesting that political systems can serve as a paradigm for management of the university. He makes a distinction between the process of specific decisions, which are very political, and long-range patterns of power and control, in which the politics of many specific decisions act to determine the management and political dynamics in each college or university. These differ from campus to campus; but emerging from these studies are consistent patterns of the undermining of faculty influence, consequent shifts in power relationships, centralization of decision-making, and increased levels of conflict among faculty and administrators.

Baldridge's latest work (1979) is concerned with the implementation of management systems, particularly the financial and management implications of management information systems and management-by-objectives approaches in academic settings.

A new work by Crowley (1980) traces the historical roots of present developments and suggests current practices have been developing at colleges and universities for a period longer than the decade of the seventies, with which most management literature is particularly concerned.

This sample of current research in the developing literature of academic management shows an increasing sophistication in approaches to management concerns. Much of this development is taking place under the rubric of academic planning, where studies, cases, models of development, and financial planning models developed from advancing management theory are applied to the more complex problems of academic management.

Planning Perspectives

The development of planning models as major elements in academic planning has paralleled the development of a more sophisticated understanding of academic management. As problems confronting college and university administrators grew in complexity so did the need for academic planning accompanied by models of future projections that would allow some sense of the consequences of management decisions.

Bowen (1974) presents a list of planning process elements in a study concerned with the assessment of higher education outcomes. He sees the blending of quantitative and judgmental evaluation methods as inevitable to deal with the variety and complexity of both higher education outcomes and higher edu-

cation management. These elements in planning for institutions are:

> (1) to define the goals and to order their priorities,
> (2) to identify and measure the outcomes,
> (3) to compare the goals and the outcomes and then to judge the degree to which the goals are being achieved, and
> (4) to measure the cost and judge the degree to which it approaches a reasonable minimum (pp. 1-2).

As Bowen points out, to actually put these elements into practice requires extraordinary powers of identification, measurement, and judgment and in the end probably still requires subjective and judgmental decisions to be made by administrators.

In a later work, Bowen (1977) notes the difficulty in quantifying for planning purposes and efficiency those values associated with higher education that are not measured in financial terms. He suggests that academic planning must make provisions in human terms for outcomes that may not be quantifiable.

Bergquist and Shoemaker (1976) and Fuller (1976) offer similar elements necessary to the planning process. Bergquist and Shoemaker are concerned with developing a cyclical process that moves academic planning from incrementalism to a part of systematic management that accommodates change. Fuller also stresses the continuous nature of academic planning and suggests the usefulness of opening the process to various political elements that make up university communities. Wilson (1978) discusses how information and data developed in response to academic planning needs can be integrated into the process of academic planning and how it can best be interpreted to meet the goals of institutions.

A variety of planning models have been developed over the past decade that assist in the collection, presentation, and analysis of basic planning information. These models are described in a number of analytical studies (Correa 1975; Dresch 1975; Mason 1976; Richardson et al. 1977) and will not be discussed in detail here except to note their continued refinement. Weisman (1979) has recently offered "foundations" for planning models that incorporate the need to be flexible. Each model, in his view, should allow the user to add, delete, or substantially revise the functions of individual elements without causing changes in the principal function of the model. He identifies two basic models that have become available—the generalized and comprehensive. Either can be tailored to the planning dimensions and needs of a particular institution.

The powers of identification and measures that Bowen spoke of in 1974 have become increasingly used on campus and a number of analyses of their use are now in the reference literature. Establishing goals to be used as reference points for subsequent planning and analysis of the model applications is a common starting point. Lawrence and Service (1977) suggest the development of such planning systems is of equal importance to and is a most critical influence on academic management.

Lawrence and Services' (1977) work reviews the elements needed within planning models, such as surveys, goal inventories, and outcome measures, along with their development and use on campuses. The importance of initial steps is stressed as necessary to assemble all of the elements needed in planning models that allow quantitative measurement of goals, outcomes, and cost. This permits the elements to be constructed into planning models that will allow ambiguous elements to be used more precisely in academic management.

A variety of planning models are now available (see Lawrence and Service 1977; Mason 1976; Richardson et al. 1977; and Updegrove 1979). Watkins (1980) and Miller (1978) note the success Stanford University has enjoyed with a model that stresses the importance of faculty and student involvement, administrative commitment, and campus familiarity with the model that promotes its effective use. Porter et al. (1979) review a number of planning models that are available and comment on varying degrees of satisfaction with their use. As Weisman (1979) notes, the basic decision in the choices of such models is between comprehensive models that must be tailored to individual institutions and individual models that require a significant amount of administrative expertise in their construction and use.

Recently, EDUCOM, a consortium of colleges and universities dedicated to the development of computer and information technology, has developed a new planning model, the EDUCOM Financial Planning Model (EFPM), which combines institutional specificity with the comprehensiveness developed in the larger models. It does this through the use of an operating program whose variables are specified by the institution using the model (Updegrove 1978; Updegrove et al. 1979). Some 63 institutions are currently engaged in the development and use of this model, which requires little on-campus computer capacity, relying instead on shared use of a larger computer system made available through EDUCOM.

While budgeting and financial planning have been the primary impetus behind the development of such models, applications beyond budgeting such as faculty tenure planning, housing, and facilities use are becoming available. The University of Southern California has developed a Faculty Planning Model (Gray, n.d.; Bottomley 1978) that combines budget projections with an analysis of hiring, tenure, promotion, and retirement trends. This allows academic planners to focus on analysis of the faculty in determining future directions for institutional policies.

The National Center for Higher Education Management Systems (NCHEMS) continues to be a primary resource for those institutions working to improve planning, budgeting, and management functions at all types of institutions. One recent publication (NCHEMS 1979) discusses institutional responses to declining enrollments and the need to closely coordinate academic and program planning and budgeting practices.

Among other researchers who have examined academic planning from comprehensive approaches, including the use of models, are Bess (1979), Estler (1980), Hollowood (1979), Lewis and Kellogg (1979), Baird and Hartnett (1980), SREB (1979), Nevison (1980), and Zemsky (1978).

Conclusions

The increasing complexity of management and planning within institutions of higher education has fostered the development of more sophisticated theories of management in higher education. Such complexity has also encouraged the development of a number of academic planning tools and models to aid university administrators in management through access to data and projections of the consequences of their decisions. The use of such models and the need for increasingly sophisticated planning seems bound to increase if institutional vitality is to be insured in a period of reduced resources.

Such management complexity increases the specialized skills required to manage higher education institutions and seems likely to result in additional conflicts between administrators and faculty over governance issues within institutions. As has been discussed, such conflicts have been endemic to higher education institutions and are unlikely to be resolved in the 1980s. The development of planning tools, the requirement of specialized skills in planning and management, and the emergence of more complex theoretical understanding of university management does suggest that knowledge and skills relating to academic planning and management will be in demand for the next decade. Crossing the line between faculty and administration may become more difficult and conflicts over policy directions established by such management practices should be expected to increase.

Colleges and universities have a certain slow and seemingly ponderous nature, particularly when contrasted to the management of other types of organizations. Academic planning does not produce solutions to all the problems that confront academic institutions, especially those that relate to social issues such as access and sexual equity (Estler 1980). Yet, by understanding the complexities of academic management and by the ability of academic planning to provide a means for the development of incremental change reflecting the concerns of the university community, an arena for the resolution of conflict

within the university can be established. It is toward such ends that academic planning and academic management must strive.

The growing complexity of academic management makes it likely that the use of models to assist in the academic planning process will continue to expand. EDUCOM estimates that only 15 to 20 percent of higher education institutions are currently using simulation models for some phase of future planning (most commonly for financial estimates).

The most significant argument in their favor is that they bring the tools of analysis and of future projection to the daily tasks of campus management. Knowing more about the elements that will make up future budgets, including the needs of staffing, facilities, and personnel costs, can make the future implications of present decisions available as considerations during the decision-making process. Such tools as the models now available provide the techniques to bring this about.

Increasingly, academic management needs to examine not just current implications of management and administrative decisions but also their future effects. In an expected era of tight resources this information will be critical. Thus emphasis on academic planning, with an increased use of modeling as an essential element within it, is a major response to the task of professional management in colleges and universities.

Continued refinement of the tasks of academic management as well as the use of new analytical tools are not in themselves a recipe for success. Campuses are still made up not of just data but of individuals seeking knowledge. For management to be successful in such an environment there must be involvement so that policy decisions and the assumptions on which they are based are shared. All of the elements that make academic management complex—students, faculty, staff—must be involved in the planning process if it is to be successful. Professional management, to be successful in an academic environment, must not only be able to use the tools available but to involve diverse and competing interests in the tasks of administration and management.

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